



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D5155-043
Job Sheet 165845



Part No: D5155-043

Job Qty: 2 ea

Part Name: Co-Pilot Collective Head Assembly (212/412)



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 9/30/17

Job Tracking No:

Due Date: 10/31/17

Created By: Mario Poulin

Type: Stock

Description:

Note: DWG REV B IPP REV:A 15.05.07 NEW ISSUE DD VERF:JLM IPP REV:B 15.07.02 AS PER DWG REV.B DD VERF:JLM

Ship Via:

5000259

Bill of Materials

Job Routing

Op No	Operation	Qty	Due Date	Standard		Workcenter/Supplier	
				Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time
90	Start up Operation	2 Ea	10/30/17	0.00	0.00	Start up container	
110	Large Fab	2 pcs	10/30/17	0.00	0.81	Large Fab 2	
120	QC	2 pcs	10/30/17	0.00	0.00	QC9	
130	QC	2 pcs	10/30/17	0.00	0.00	QC5	
140	Outsource	2 pcs	10/30/17	0.00	0.00	Outsource4	
150	Packaging	2 pcs	10/30/17	0.00	0.00	Packaging2	
160	QC	2 pcs	10/30/17	0.00	0.00	QC6	
170	Small Fab	2 pcs	10/31/17	0.00	2.08	Small Fab	
180	QC	2 pcs	10/31/17	0.00	0.00	QC5	
190	Packaging	2 pcs	10/31/17	0.00	0.00	Packaging3	
200	QC21-SA	2 Ea	10/31/17	0.00	0.00	QC21	

NOV 07 2017

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D4410-2	2	5	0	0
	D5155-3	2	4	0	0
170-Small Fab	90296A108	22	84	0	0
	D5155-11	2	6	0	0
	D5156-11	2	22	0	0
	MS16562-223	4	25	0	0
	MS24693-24B	2	0	0	0

Part Specifications

Specifications could not be found.

DART
AEROSPACE
S004318


Co-Pilot Collective Head Assembly (212/412)

PART NO:
Revision:
Operation:
Quantity:
Change No:

D5155-043

Outsource
2

Mfg Date: 10/31/17
Job No: 165845

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Work Order ID 165845

Thursday, August 31, 2017 10:32:10 AM

ASAP

165845

Page 1

Item ID: D5155-043 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Co-Pilot Collective Head Assembly (212/412)
Start Date: 8/31/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 9/14/2017 Req'd Qty: 2.00 ***2*** Customer:

Reference:

Approvals: Process Plan: W Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D5155	B

110 Weld per dwg A/R Aluminum rod Batch: 137078 0.00***110***

Large Fab

Memo 0.20

Large Fab

WELD D4410-7 to D5155-3 AS PER DWG

2 SEP 05 2017 DAS 24 9-89

120 QC9- Inspect visual per QSI004- Fusion Welds 0.00

120

QC

Memo 0.02

Quality Control

2 17-09-13 DAS 9 9-89

130 QC5- Inspect part completeness to step on W/O 0.00

130

QC

Memo 0.02

Quality Control

2 17-09-13 DAS 9 9-89

Work Order ID 165845***165845***

Page 2

Thursday, August 31, 2017 10:32:10 AM

Item ID: D5155-043 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Co-Pilot Collective Head Assembly (212/412)
Start Date: 8/31/2017 Start Qty: 2.00 *2* Cust Item ID:
Required Date: 9/14/2017 Req'd Qty: 2.00 *2* Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start *NR1*
QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 *140* Outsource4 Outsource process - Anodize	Outsource process-Anodize per QSI017 4.1.10.1 Memo Issue P/O to ATG: 34769 Black Anodize as per Dwg D5155 C OF C REQUIRED	0.00 144.00				2			SEP 15 2017
150 *150* Packaging Packaging	Receive & Inspect for Damage & Mat'l Certs Memo C OF C REQUIRED	0.00 0.02							2x SPT-70-30
160 *160* QC Quality Control	QC6- All purchased or subcontracted products Memo	0.00 0.02				2			DAS 38 9-88 NOV 01 2017

Thursday, August 31, 2017 10:32:10 AM

Item ID: D5155-043

Accept

N900040100

Setup

Start

NS1

Revision ID:

Stop

NS?

Item Name: Co-Pilot Collective Head Assembly (212/412)

Start Date: 8/31/2017

Start Qty: 2.00

2

Cust Item ID:**Required Date:** 9/14/2017**Req'd Qty: 2.00**

2

Customer:

Reference:

Run

Start

NR1

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

NR2

QC:

Date:

SPC (Y/N):

Date:

[illegible]

165845

Thursday, August 31, 2017 10:32:10 AM

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 8/31/2017 **Start Qty:** 2.00 ***2***

Cust Item ID:

Required Date: 9/14/2017 **Req'd Qty:** 2.00 ***2***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

**Insp.
Stamp**

0.00

200

QC

Memo

0.20

Quality Control

Picklist Print

Thursday, August 31, 2017 10:32:07 AM

Page 1

Work Order ID: 165845

165845

Parent Item: D5155-043

D5155-043

Parent Item Name: Co-Pilot Collective Head Assembly (212/412)

Start Date: 8/31/2017

Required Date: 9/14/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 15.05.07 NEW ISSUE DD VERF:JLM IPP
REV:B 15.07.02 AS PER DWG REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4410-7 *D4410-7* Conduit		Manufactured	No			110	Each	8.0000	1	2		SEP 05 2017	DAS 24 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				WA001				8					
				146092				4		2			
				156513				4					
D5155-3 *D5155-3* Co-Pilot Collective Head (212)		Manufactured	No			110	Each	6.0000	1	2		SEP 05 2017	DAS 24 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				ST374				4					
				164493				4					
				WA001				2					
				147833				2		2			
D5155-11 *D5155-11* Co-Pilot Collective Head (212)		Manufactured	No			170	Each	2.0000	1	2			
				<u>Location</u>				<u>Loc Qty</u>					
				ST375				2					
				147832				2					
D5156-11 *D5156-11* Back Plate		Manufactured	No			170	Each	22.0000	1	2			
				<u>Location</u>				<u>Loc Qty</u>					
				ST375				22					
				145942				22					

Picklist Print

Thursday, August 31, 2017 10:32:08 AM

Page 2

Work Order ID: 165845

165845

Parent Item: D5155-043

D5155-043

Parent Item Name: Co-Pilot Collective Head Assembly (212/412)

Start Date: 8/31/2017

Required Date: 9/14/2017

Start Qty: 2.00

Required Qty: 2.00

90296A108 Purchased No 170 Each 102.0000 11 22

90296A108

Heli-Coil Insert

**

Location

Loc Qty

Loc Code

GA

102

m132757

10

m136548

85

m136747

7

MS16562-223 Purchased No 170 Each 31.0000 2 4

MS16562-223

Spring Pin

**

Location

Loc Qty

Loc Code

ST316

31

m134574

6

m135536

25

MS24693-24B Purchased No 170 Each 76.0000 7 14

MS24693-24B

Screw

**

Location

Loc Qty

Loc Code

ST288

76

m134676

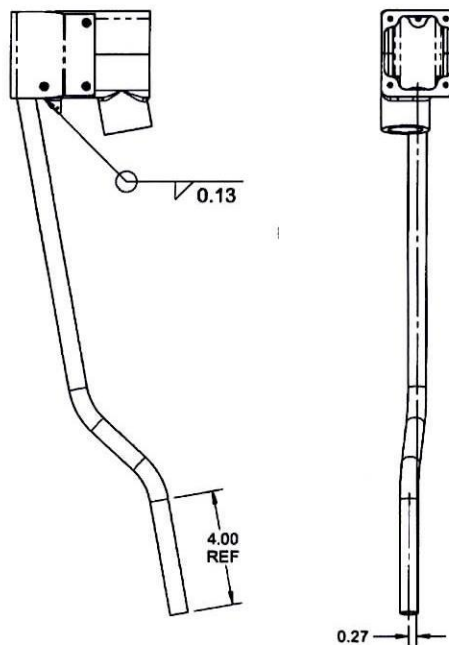
76

Thursday, August 31, 2017 10:32:08 AM

Shop Packet Print

Page 2

ITEM	QTY	P/N	DESCRIPTION
1	X	D5155-041	CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)
2	1	D4410-7	CONDUIT
3	1	D5155-1	CO-PILOT COLLECTIVE HEAD (205)
4	1	D5155-9	CO-PILOT COLLECTIVE HEAD (205)
5	1	D5156-9	BACK PLATE
6	11	90296A108	HELI-COIL INSERT (6-32 X 0.276)
7	2	MS16562-223	SLOTTED SPRING PIN
8	7	MS24893-24B	SCREW, CSK 100"

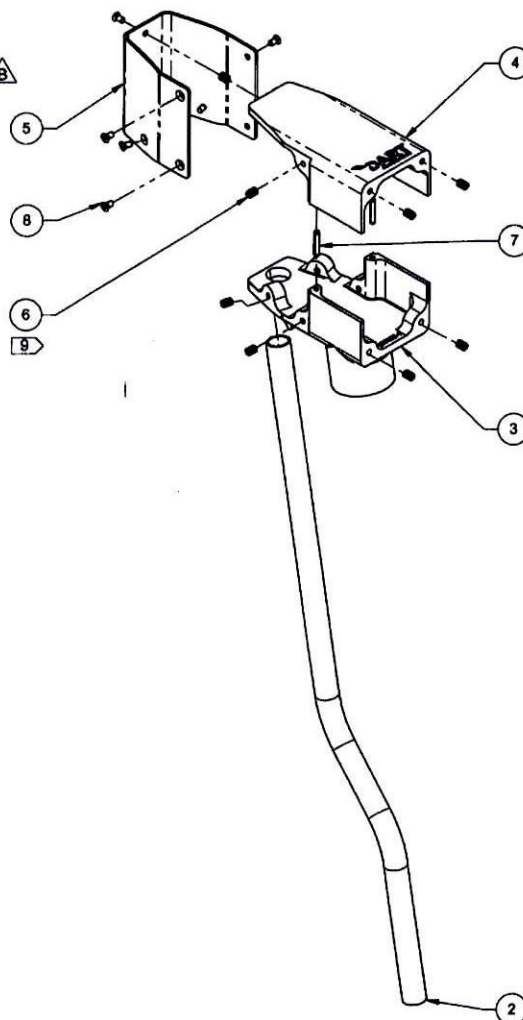


D5155-041 WELDING DETAIL

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8825F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.08 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING

D5155-041 CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)



w/o 165845

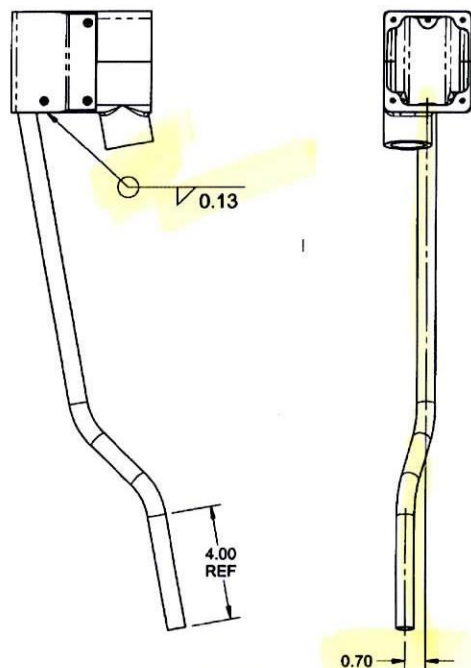
RELEASED

A.P. 2015 JUL 02 Rev 15-577

B	REVISE DIM: ZN D3-7, REVISE NOTE 2: ZN A8-13, A8-14, REVISE LENGTH OF PIN: ZN D6-1, D6-2, D5-3, D6-4, REVISE DEPTH: ZN C7-5, C7-7, C7-9, C7-11, C5-13, C4-14, REVISE DIM: ZN C7-5, C7-7, C7-9, C8-11, B7-13, B7-14, B2-5, B2-7, B2-8, B2-11, C5-13, C4-14, D8-6, D8-8, D8-10, D5-8, D5-10, D5-12, B8-7, D7-12, C7-5, C7-7, C7-9, C8-11, D2-13, D2-14	VS	15.05.21
A	NEW ISSUE	VS	14.09.10
REV.	DESCRIPTION	BY	DATE
DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	VS		
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	JFS	D5155	SHEET 1 OF 14
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
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ITEM	QTY	P/N	DESCRIPTION
1	X	D5155-043	CO-PILOT COLLECTIVE HEAD ASSEMBLY (212)
2	1	D4410-7	CONDUIT
3	1	D5155-3	CO-PILOT COLLECTIVE HEAD (212)
4	1	D5155-11	CO-PILOT COLLECTIVE HEAD (212)
5	1	D5158-11	BACK PLATE
6	11	90296A108	HELI-COIL INSERT (6-32 X 0.276)
7	2	MS16562-223	SLOTTED SPRING PIN
8	7	MS24693-24B	SCREW, CSK 100"

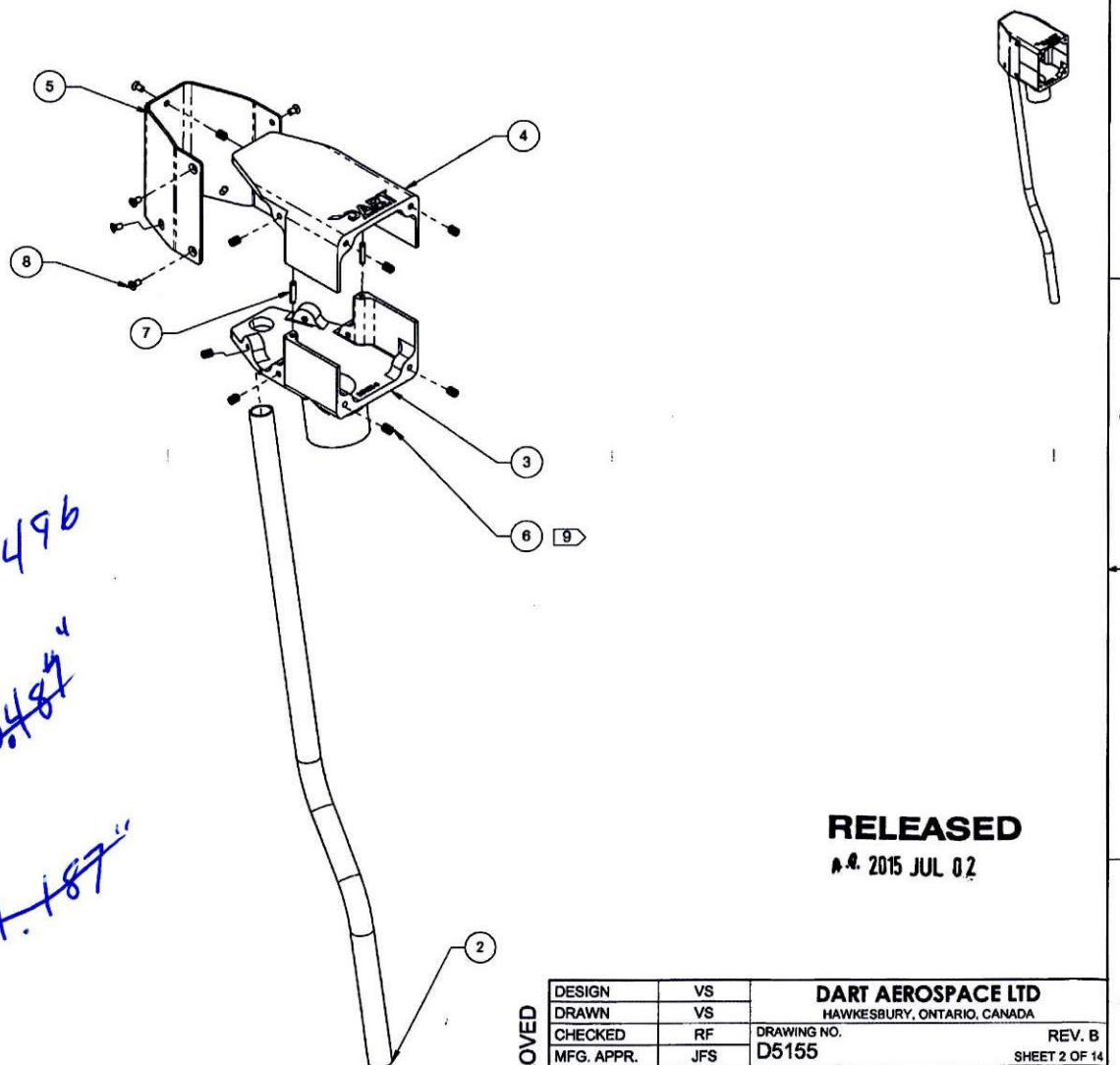


D5155-043 WELDING DETAIL

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.20 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING

D5155-043 CO-PILOT COLLECTIVE HEAD ASSY (212)



RELEASED
A.R. 2015 JUL 02

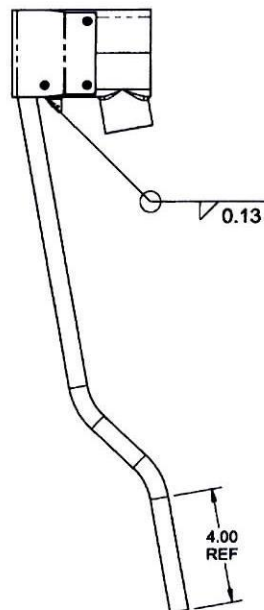
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DRAWN	VS		
CHECKED	RF		DRAWING NO.
MFG. APPR.	JFS		D5155
APPROVED	HS		TITLE
DE APPR.	DS		CO-PILOT COLLECTIVE HEAD
DATE	15.05.21	REV. B SHEET 2 OF 14 SCALE NTS	

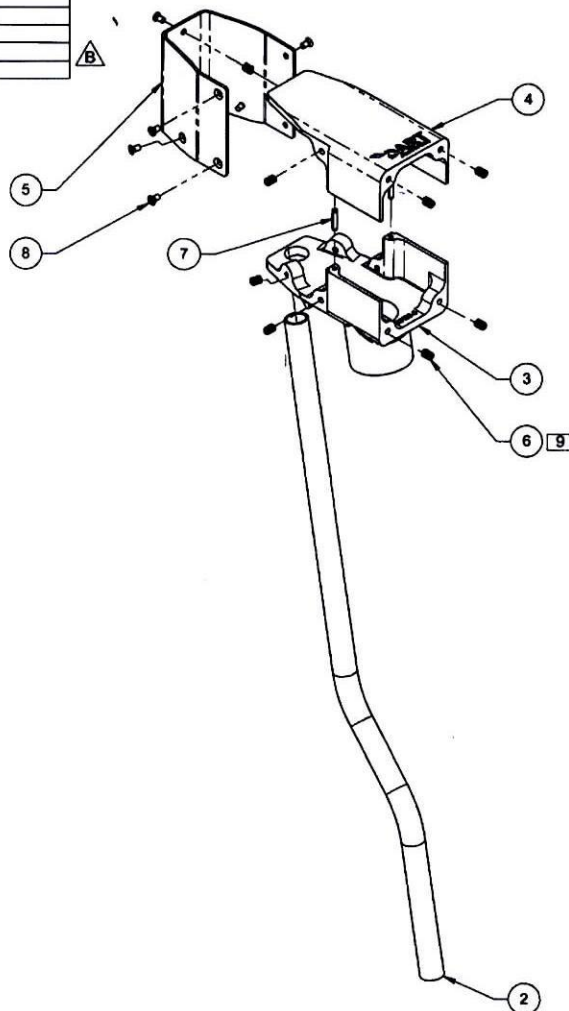
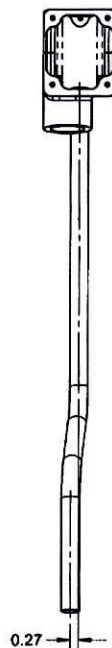
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ITEM	QTY	P/N	DESCRIPTION
1	X	D5155-045	CO-PILOT COLLECTIVE HEAD ASSEMBLY (EAGLE SINGLE)
2	1	D4410-7	CONDUIT
3	1	D5155-5	CO-PILOT COLLECTIVE HEAD (EAGLE SINGLE)
4	1	D5155-9	CO-PILOT COLLECTIVE HEAD (205)
5	1	D5156-9	BACK PLATE
6	11	90296A108	HELI-COIL INSERT (6-32 X 0.276)
7	2	MS16562-223	SLOTTED SPRING PIN
8	7	MS24693-24B	SCREW, CSK 100'



D5155-045 WELDING DETAIL



D5155-045 CO-PILOT COLLECTIVE HEAD ASSY (EAGLE SINGLE)

NOTES:

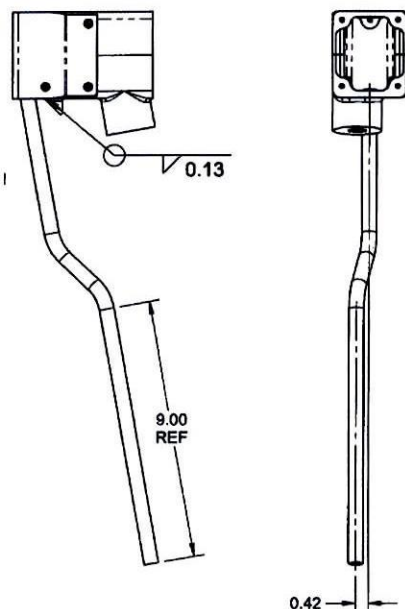
- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.06 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING

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DESIGN	VS	DART AEROSPACE LTD	
DRAWN	VS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	JFS	D5155	SHEET 3 OF 14
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
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A-E 2015 JUL 02

ITEM	QTY	P/N	DESCRIPTION
1	X	D5155-047	CO-PILOT COLLECTIVE HEAD ASSEMBLY
2	1	D5054-1	CONDUIT
3	2	D5073-1	SNAP RING
4	1	D5155-7	CO-PILOT COLLECTIVE HEAD (205)
5	1	D5155-9	CO-PILOT COLLECTIVE HEAD (205)
6	1	D5156-9	BACK PLATE
7	11	90296A108	HELL-COIL INSERT (6-32 X 0.276)
8	2	MS16562-223	SLOTTED SPRING PIN
9	7	MS24693-24B	SCREW, CSK 100°
10	1	MS27641-3	BEARING

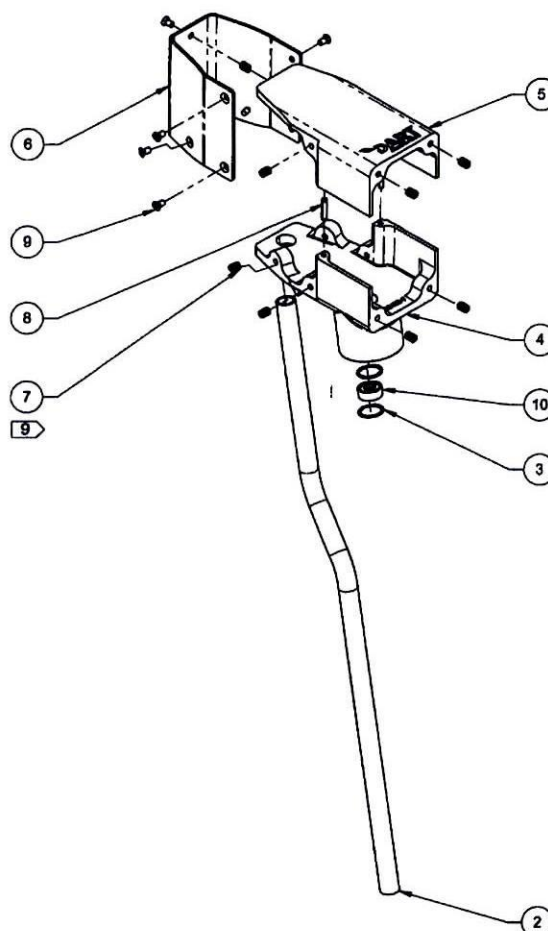


D5155-047 WELDING DETAIL

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.14 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING

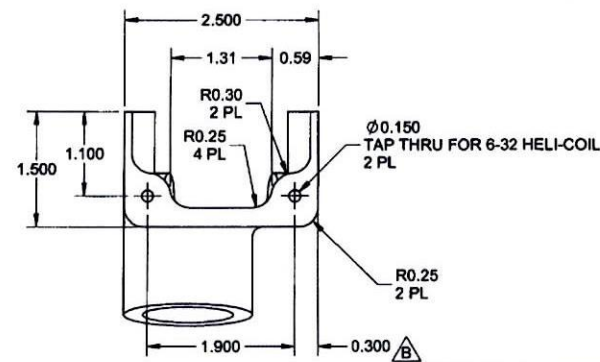
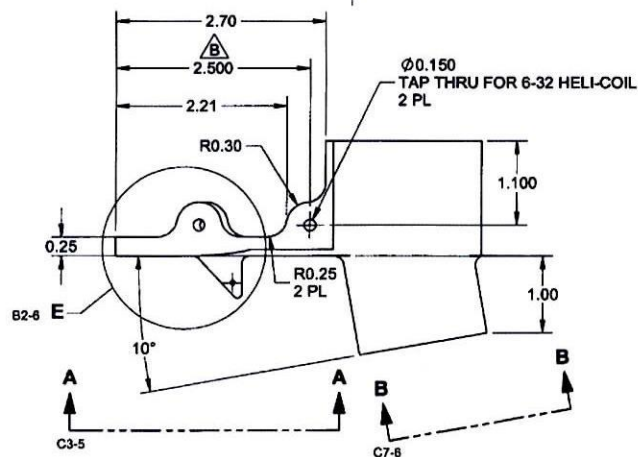
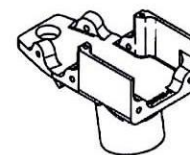
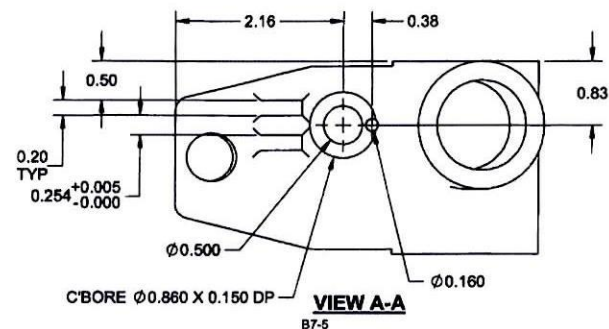
**D5155-047 CO-PILOT COLLECTIVE HEAD ASSY
FOR 205 WITH 204-001-290-5 STICK AND THROTTLE ASSEMBLY INSTALLED**



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15 JUL 02

DESIGN	VS	DART AEROSPACE LTD	
DRAWN	VS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	JFS	D5155	SHEET 4 OF 14
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
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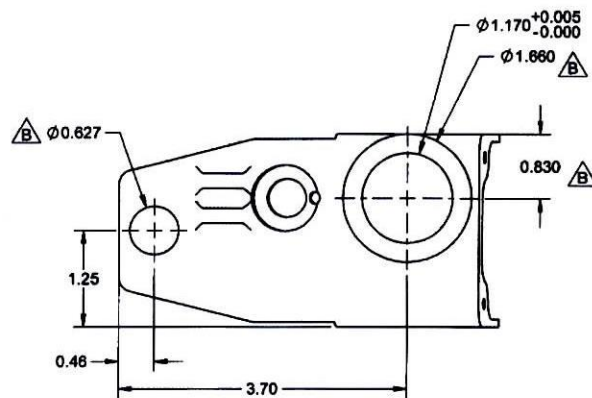


A.P. 2015 JUL 02

2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3 IN THIS AREA TO MAX DEPTH
OF 0.010 WITH A MIN. TOOL RAD OF R0.010
7) WEIGHT: 0.47 lbs
8) UNDIMENSIONED FEATURES ARE DEFINED BY D5155-1.SLDPRT

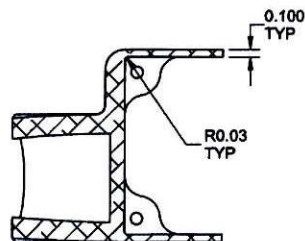
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DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D5155 TITLE CO-PILOT COLLECTIVE HEAD COPYRIGHT © 2013 BY DART AEROSPACE LTD. THIS DOCUMENT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.	REV. B
DRAWN	VS		SHEET 5 OF 14
CHECKED	RF		SCALE
MFG. APPR.	JFS		NTS
APPROVED	HS		
DE APPR.	DS		
DATE 15.05.21			



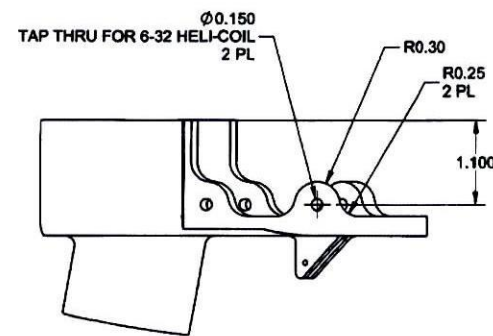
VIEW B-B

B5-5



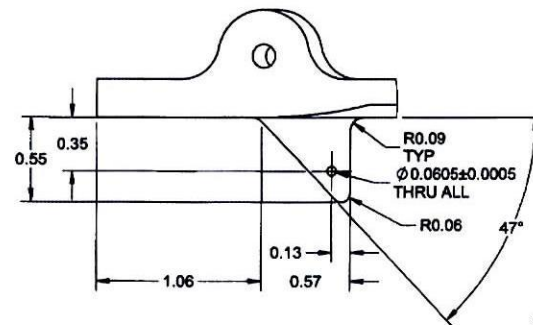
SECTION D-D

D6-5



VIEW C-C

D7-5



DETAIL E

B7-5

RELEASED

A.E 2015 JUL 02

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A

D5155-1 CO-PILOT COLLECTIVE HEAD (205)

DETAIL VIEWS

APPROVED

DESIGN	VS	DART AEROSPACE LTD	
DRAWN	VS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	JFS	D5155	SHEET 6 OF 14
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
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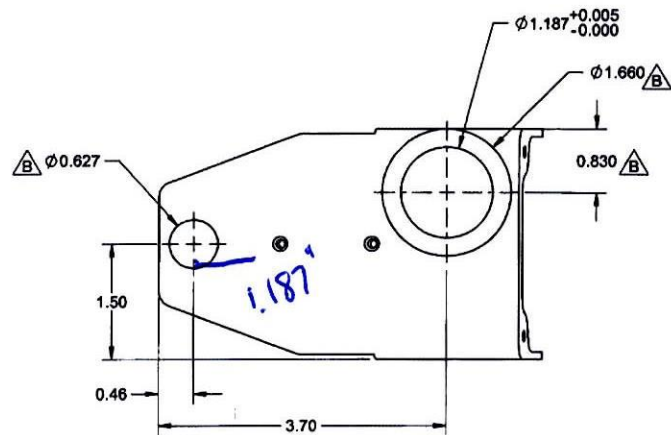
8 7 6 5 4 3 2 1

D

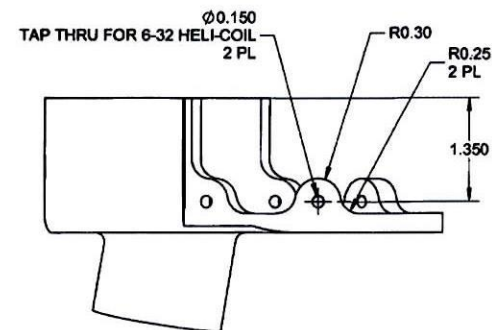
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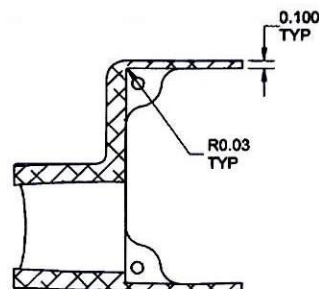
A



VIEW G-G
B6-7



VIEW H-H
D7-7



SECTION I-I
D6-7

RELEASED
A.9.2015 JUL 02

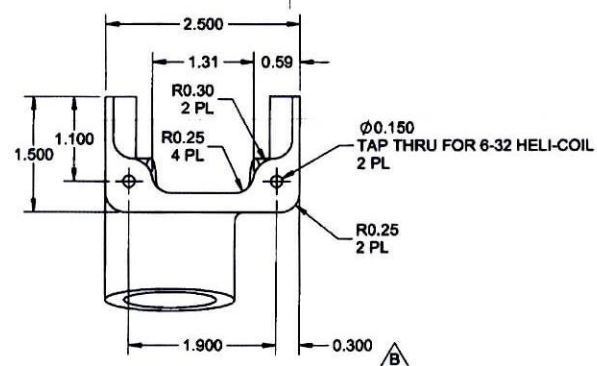
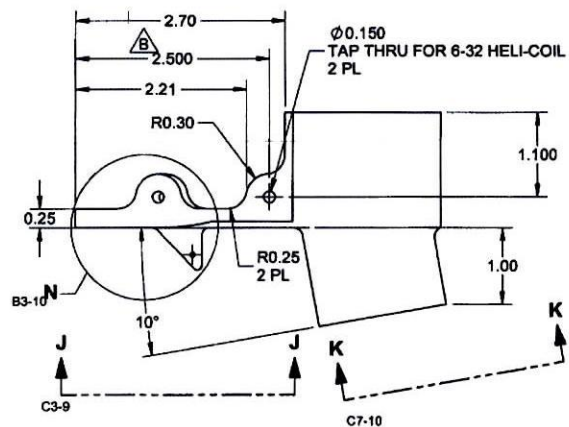
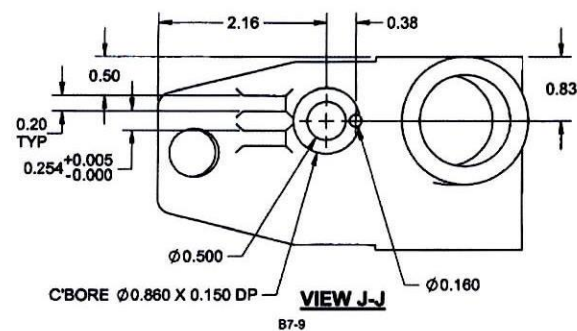
- NOTES:**
 1) MATERIAL: N/A
 2) FINISH: N/A
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: N/A
 7) WEIGHT: N/A

D5155-3 CO-PILOT COLLECTIVE HEAD (212)
DETAIL VIEWS

APPROVED

DESIGN	VS	DART AEROSPACE LTD	
DRAWN	VS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	JFS	D5155	SHEET 8 OF 14
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	
DATE	15.05.21	NTS	
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8 7 6 5 4 3 2 1

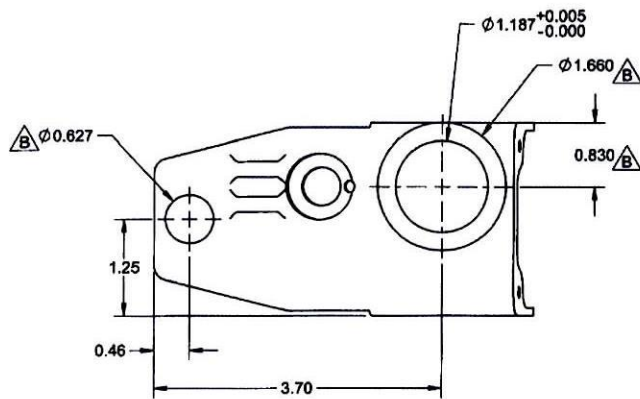


A.Q. 2015 JUL 02

2) FINISH: NONE
3) TOLERANCES: PER DART QSI 0081102
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3 IN THIS AREA TO MAX DEPTH
OF 0.010 WITH A MIN. TOOL RAD OF R0.010
7) WEIGHT: 0.45 lbs
8) UNDIMENSIONED FEATURES DEFINED BY D5155-5.SLDPRT

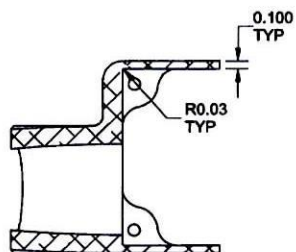
D5155-5 CO-PILOT COLLECTIVE HEAD (EAGLE SINGLE)

DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D5155 TITLE CO-PILOT COLLECTIVE HEAD COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD. THIS DOCUMENT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN CONSENT OF DART AEROSPACE LTD.	REV. B
DRAWN	VS		SHEET 9 OF 14
CHECKED	RF		SCALE
MFG. APPR.	JFS		NTS
APPROVED	HS		
DE APPR.	DS		
DATE	15.05.21		



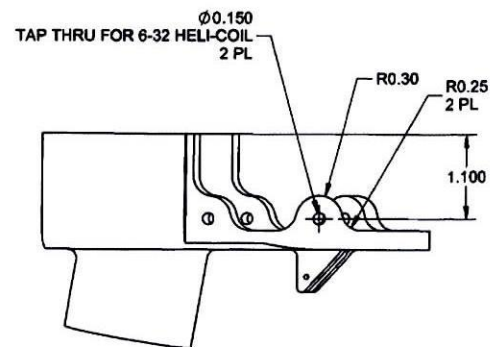
VIEW K-K

B6-9



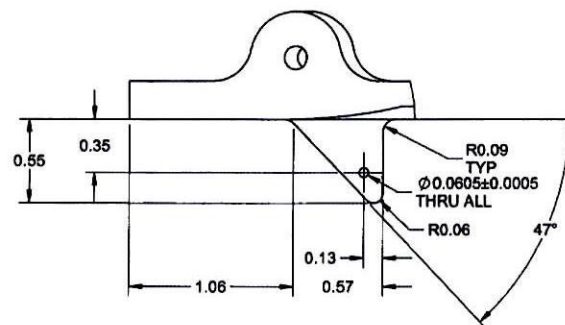
SECTION M-M

D6-9



VIEW L-L

D7-9



DETAIL N

B7-9

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A.P. 2015 JUL 02

NOTES:

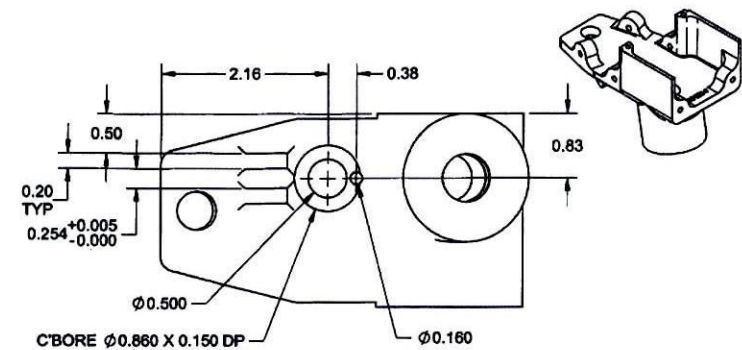
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A

D5155-5 CO-PILOT COLLECTIVE HEAD (EAGLE SINGLE)
DETAIL VIEWS

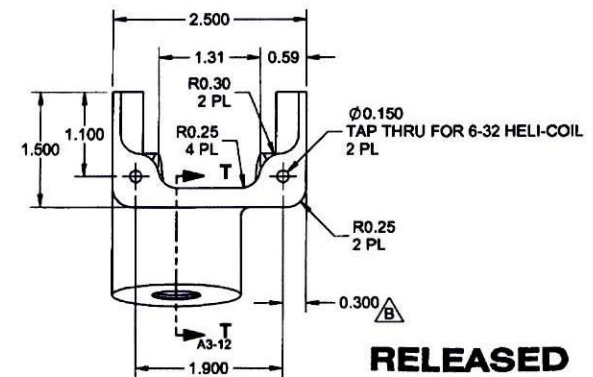
APPROVED

DESIGN	VS
DRAWN	VS
CHECKED	RF
MFG. APPR.	JFS
APPROVED	HS
DE APPR.	DS
DATE	15.05.21

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D5155	REV. B SHEET 10 OF 14
TITLE CO-PILOT COLLECTIVE HEAD	SCALE NTS
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B7-11

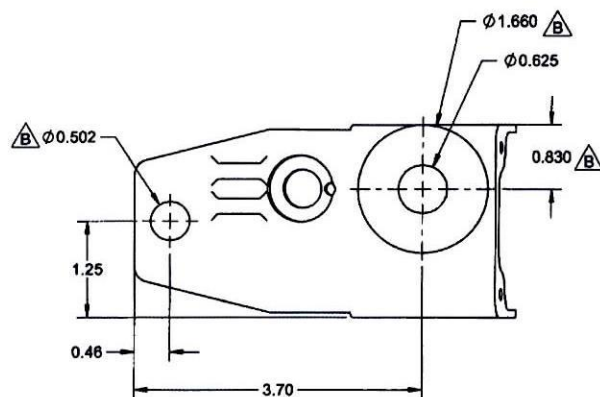


A.P. 2015 JUL 02

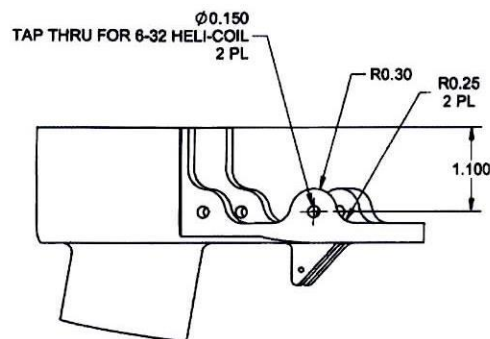
7) WEIGHT: 0.58 lbs
8) UNDIMENSIONED FEATURES DEFINED BY D5155-7.SLDPRT

APPROVED

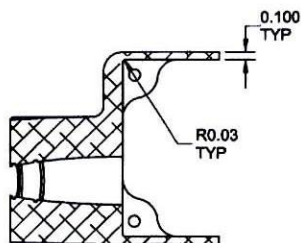
DESIGN	VS	DART AEROSPACE LTD	
DRAWN	VS	NAWESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	JFS	D4155	SHEET 11 of 14
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
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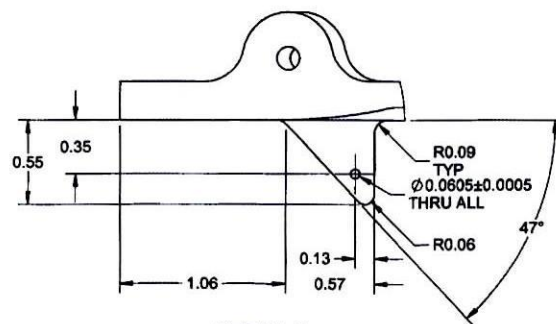
VIEW P-P
BS-11



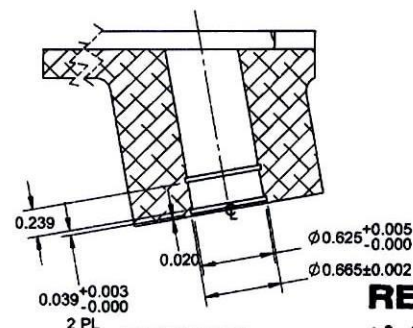
VIEW Q-Q
D7-11



SECTION R-R
C6-11



DETAIL S
B6-11



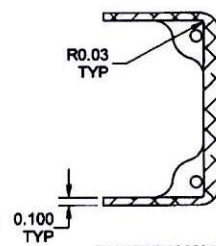
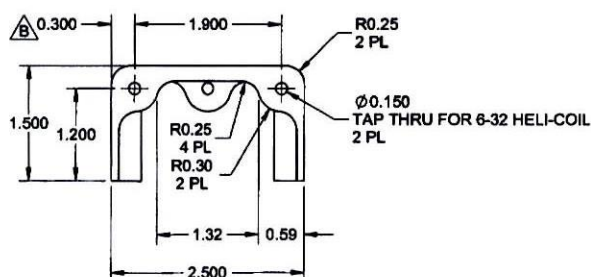
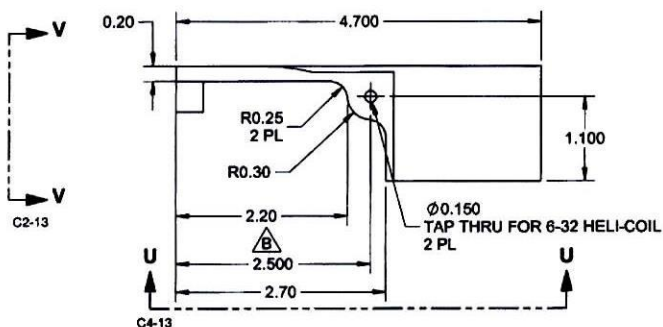
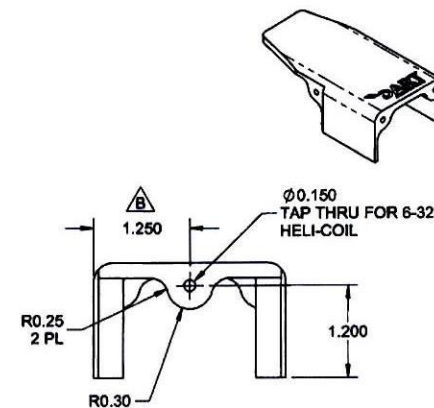
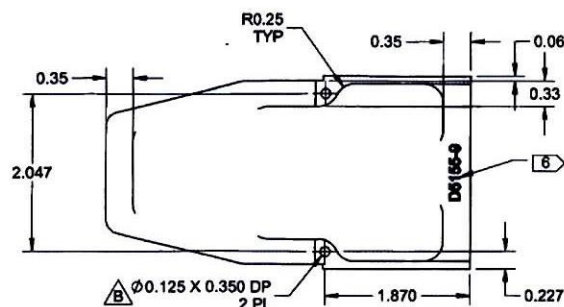
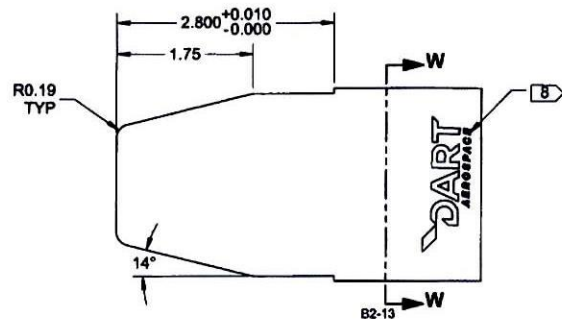
SECTION T-T
B2-11

RELEASED
A.R. 2015 JUL 02

- NOTES:**
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: N/A

D5155-7 CO-PILOT COLLECTIVE HEAD (205)
DETAIL VIEWS

APPROVED	DESIGN	VS	DART AEROSPACE LTD	
	DRAWN	VS	HAWKESBURY, ONTARIO, CANADA	
	CHECKED	RF	DRAWING NO.	REV. B
	MFG. APPR.	JFS	D5155	SHEET 12 OF 14
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
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4.8. 2015 JUL 02

SECTION W-W
D5-13

NOTES:

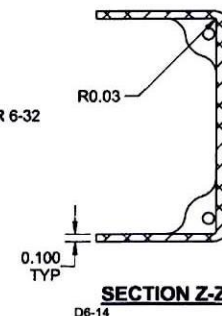
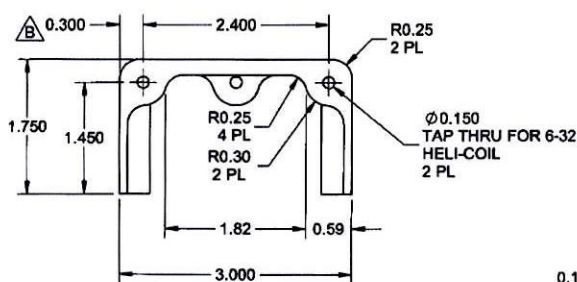
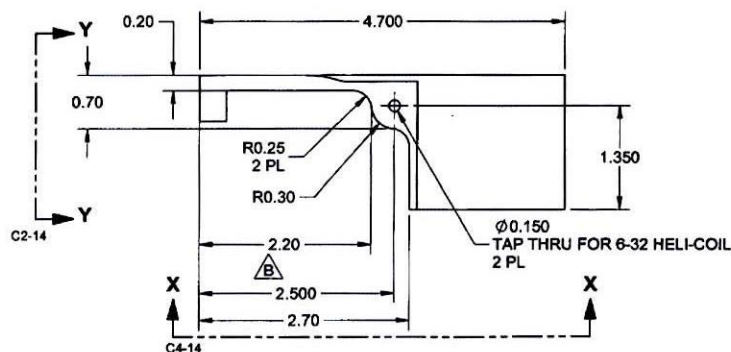
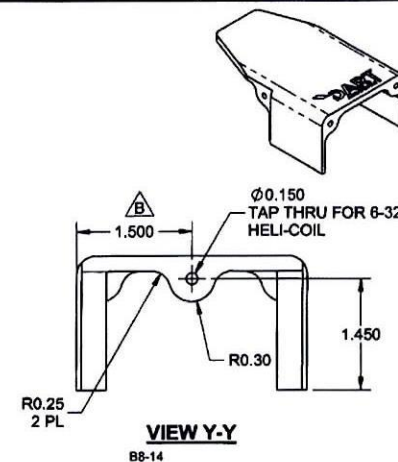
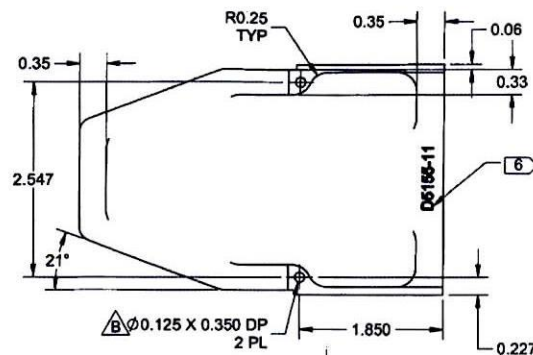
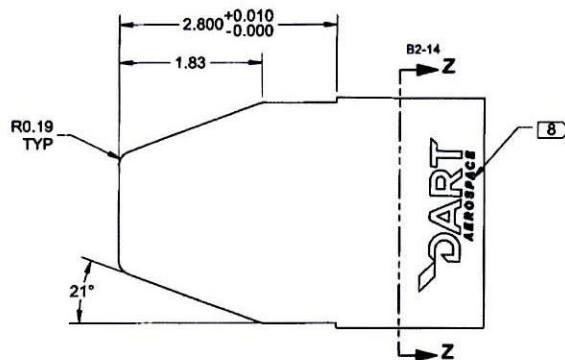
- 1) MATERIAL: 6061-T6/T651/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4180)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II
OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 8.3 IN THIS AREA TO MAX DEPTH
OF 0.010 WITH A MIN. TOOL RAD OF R0.010
- 7) WEIGHT: 0.31 lbs
- 8) ENGRAVE "DART" LOGO AS SHOWN 0.003-0.005 DP
- 9) UNDIMENSIONED FEATURES DEFINED BY D5155-9.SLDPRT

D5155-9 CO-PILOT COLLECTIVE HEAD (205)

APPROVED

DESIGN	VS
DRAWN	VS
CHECKED	RF
MFG. APPR.	JFS
APPROVED	HS
DE APPR.	DS
DATE	15.05.21

DART AEROSPACE LTD	
HAWKESBURY, ONTARIO, CANADA	
DRAWING NO.	REV. B
D5155	SHEET 13 OF 14
TITLE	SCALE
CO-PILOT COLLECTIVE HEAD	NTS
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NOTES:

- 1) MATERIAL: 6061-T6/T651/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II
OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3 IN THIS AREA TO MAX DEPTH
OF 0.010 WITH A MIN. TOOL RAD OF R0.010
- 7) WEIGHT: 0.36 lbs
- 8) ENGRAVE "DART" LOGO AS SHOWN 0.003-0.005 DP
- 8) UNDIMENSIONED FEATURES DEFINED BY D5155-11.SLDPRT

D5155-11 CO-PILOT COLLECTIVE HEAD (212)

RELEASED

4. 2015 JUL 02

APPROVED	DESIGN	VS	DART AEROSPACE LTD	
	DRAWN	VS	HAWKESBURY, ONTARIO, CANADA	
	CHECKED	RF	DRAWING NO.	REV. B
	MFG. APPR.	JFS	D5155	SHEET 14 OF 14
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	CO-PILOT COLLECTIVE HEAD NTS	
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Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038153

Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO038153
PO Date: 10/26/17
Due Date:
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items												
Line Item	Job	Part	Rev	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		D4842-1	-	Lower Cutter Deflector Hard Anodize color Black, Prime		Firmed	10/26/17	5 pcs	0 pcs	5 pcs	\$14.13333/pcs	\$70.67
2	165444	RB877528-4-3	-	Handle Issue P/O to ATG: ANODIZE COLOR BLACK, PER IAW MIL- A-8625F TYPE 2 CLASS 2		Firmed		1 pcs	0 pcs	1 pcs	\$13.44/pcs	\$13.44
3	165599	647.4110	-	Doubler Issue P/O to ATG: 1- Black Anodize as per Dwg 647.4100		Firmed	10/26/17	6 pcs	0 pcs	6 pcs	\$25.3333/pcs	\$152.00
4	165845	D5155-043	-	Co-Pilot Collective Head Assembly (212/412)		Firmed	10/26/17	2 pcs	0 pcs	2 pcs	\$13.44433/pcs	\$26.89
5	165846	D5155-045	-	Co-Pilot Collective Head Assembly (Eagle Single) Issue P/O to ATG: Black Anodize as per Dwg D5155 C OF C REQUIRED		Firmed	10/26/17	1 pcs	0 pcs	1 pcs	\$13.4433/pcs	\$13.44
6	165431	RBEM533V5000101-3	-	Handle -Issue P/O to ATG: -ANODIZE COLOR BLACK, PER IAW MIL- A-8625F TYPE 2 CLASS 2 - Certificate of Conformity is required		Firmed	10/26/17	1 pcs	0 pcs	1 pcs	\$13.4433/pcs	\$13.44
7	165025	RBEM533V5000101-5	-	Plug -Issue P/O to ATG: -ANODIZE COLOR		Firmed	10/26/17	4 pcs	0 pcs	4 pcs	\$13.4433/pcs	\$53.77



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 913985

Date: 11-Oct-17

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
2 ea	Part: D5155-043 Co-Pilot Collective Head Assy Black Anodize per MIL-A-8625F, Type II, Class 2, .0004-.0010" (.4 - 1 mils). Job: 21728	Rev: B PO: PO37769 Line: 11	SP17-10-30
1 ea	Part: D5155-045 Co-Pilot Collective Head Assy Black Anodize per MIL-A-8625F, Type II, Class 2, .0004-.0010" (.4 - 1 mils). Job: 21729	Rev: B PO: PO37769 Line: 12	
4 ea	Part: RBEM533V5000101-5 Plug Black Anodize per MIL-A-8625F, Type II, Class 2, .0004-.0010" (.4 - 1 mils). Job: 21719	Rev: 1 PO: PO37769 Line: 2	
1 ea	Part: RBEM553V5000101-3 Handle Black Anodize per MIL-A-8625F, Type II, Class 2, .0004-.0010" (.4 - 1 mils). Job: 21722	Rev: 1 PO: PO37769 Line: 5	
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>11/10/2017</u> Certified Signature: <u>[Signature]</u> Receiver Signature: <u>[Signature]</u> A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of Made in Canada.			